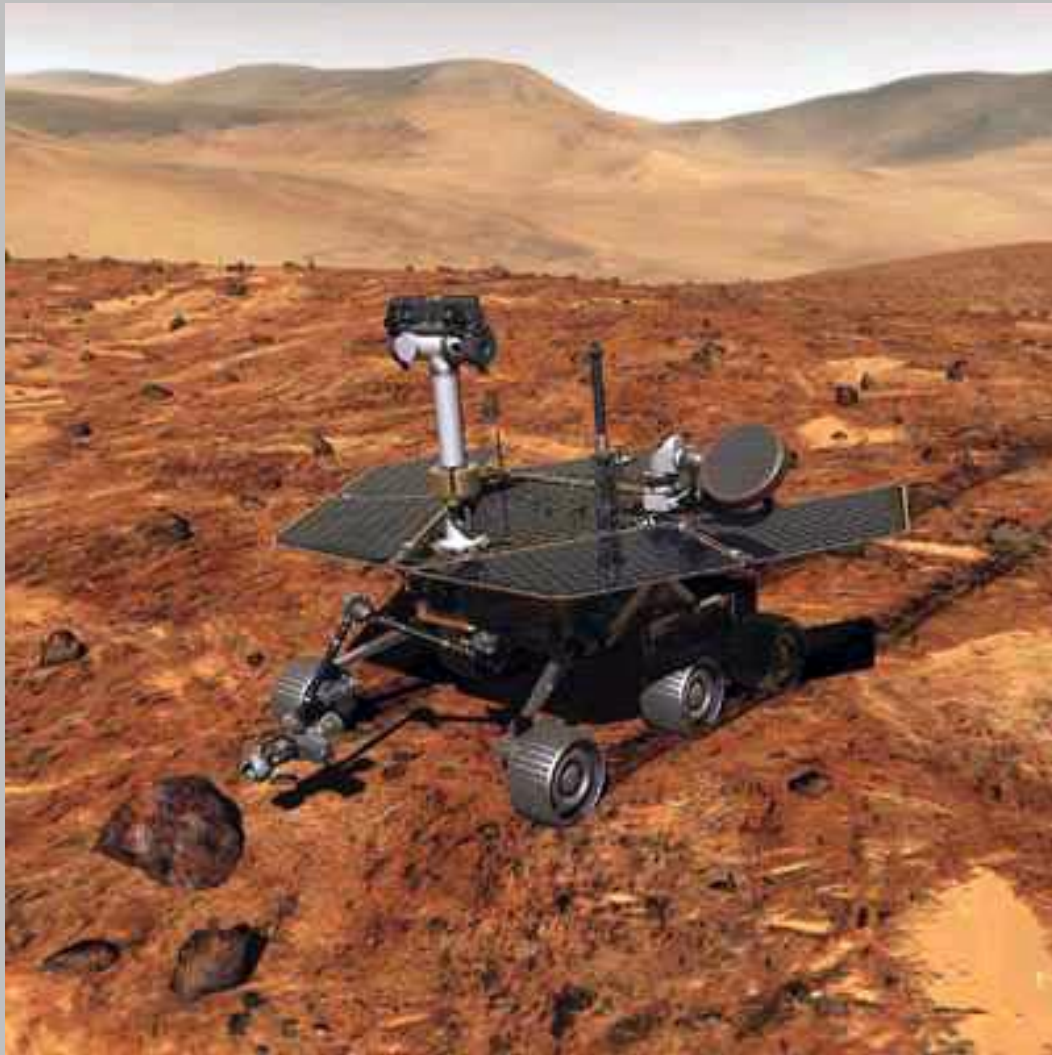




January 2004

AFRL technologies guide, power Mars rovers



Engineers from the Air Force Research Laboratory have designed the computer that steered Mars Explorer Rover Spirit to a safe landing on Jan. 4. An additional technology, a battery co-developed by AFRL, will power Spirit and a second rover, Opportunity – scheduled to land Jan. 25-, during their exploration of Mars terrain. AFRL's Space Vehicles Directorate designed the radiation-resistant computer, Rad 6000, which controlled the spacecraft during its flight from Earth. Lightweight, high-power, lithium ion rechargeable batteries, a joint project by AFRL, NASA Glenn Research Center in Cleveland and the Jet Propulsion Laboratory in Pasadena, Calif., will run the rovers a few hours after landing. The batteries will provide power at night, while solar panels recharge the batteries during the day. (Courtesy photo)